AMENDMENTS TO THE CLAIMS:

Claims 1 - 2 (canceled)

Claims 4 - 9 (canceled)

Claims 11 - 18 (canceled)

Claim 20 (canceled)

1   Claim 21. (new)   A method for providing context save and restore using a test

2   scan chain in an integrated circuit device also having a memory and a state

3   machine, the method comprising:

4   providing a scan chain of digital logic components comprised of a plurality

5   of sub-chains;

6   in a test mode,

7   providing an input test data set to the scan chain, and

8   scanning the input test data set through the scan chain, and

9   providing an output test data set as an output of the scan chain;

10   in a first switch mode,

11   linking the sub-chains in parallel with each other and to a device

12   memory, and

13   reading a first functional data set from the memory;

14   in a functional mode,

15   linking the digital logic components with other logic circuitry in

16   accordance with an application to be executed by the state machine, and

17   executing the application to generate second functional data; and

18   in a second switch mode,

19   linking the sub-chains in parallel with each other and to the

20   memory;

21   storing the second functional data set in the memory.